

FIG. 1

FIG. 2 is a block diagram of a broadcast receiver system 120. The system includes a user input receiver 224, a user input decoder 222, a microprocessor 210, an IR command encoder 226, an IR emitter 228, a tuner 202, a data extractor 206, a graphics overlay generator 216, a line driver 230, a communication port 232, a display 218, a storage device 212, a storage device 214, a storage device 213, an engine 217, and an operating system 219. The system is connected to a broadcast receiver 120.

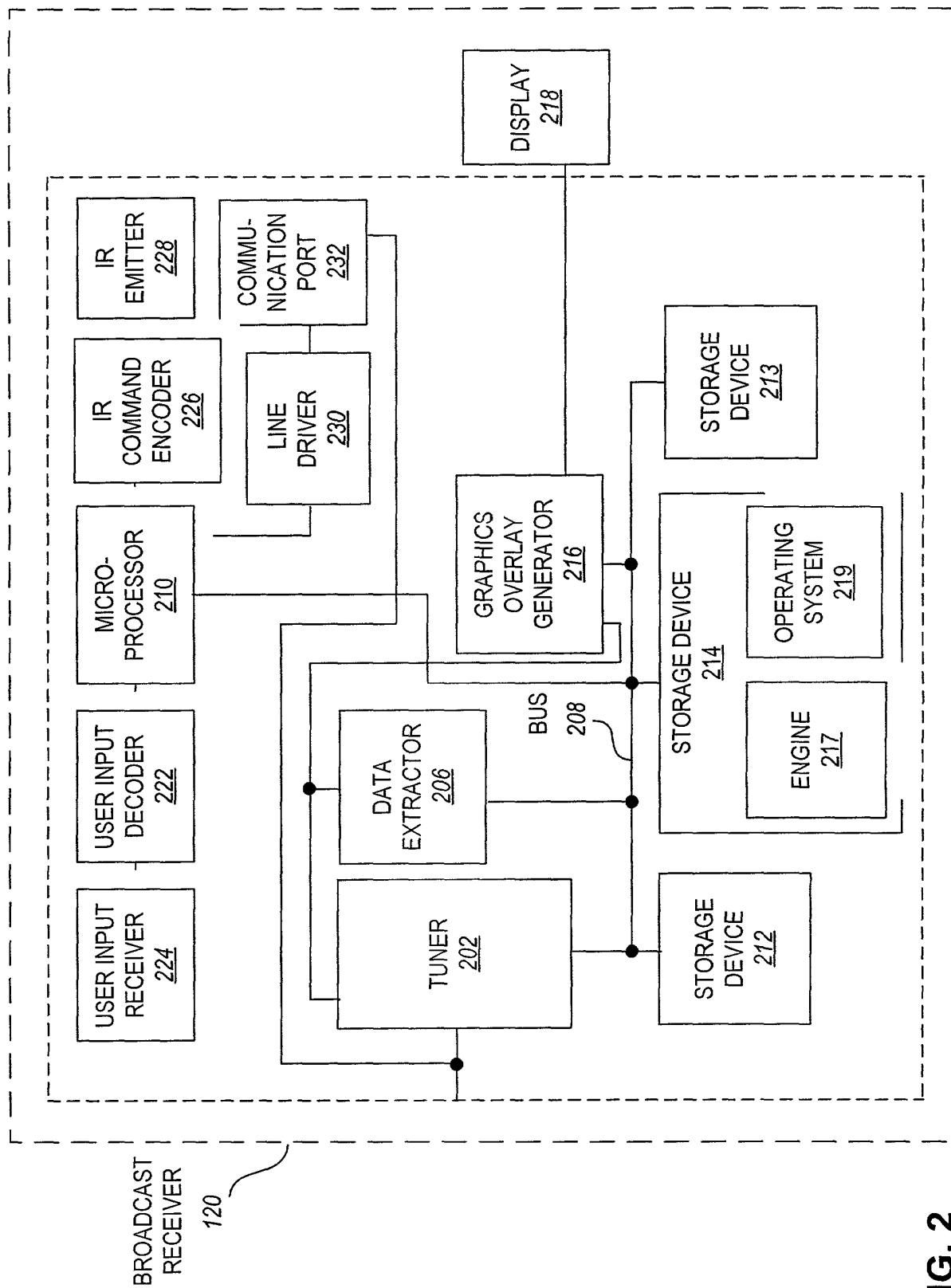
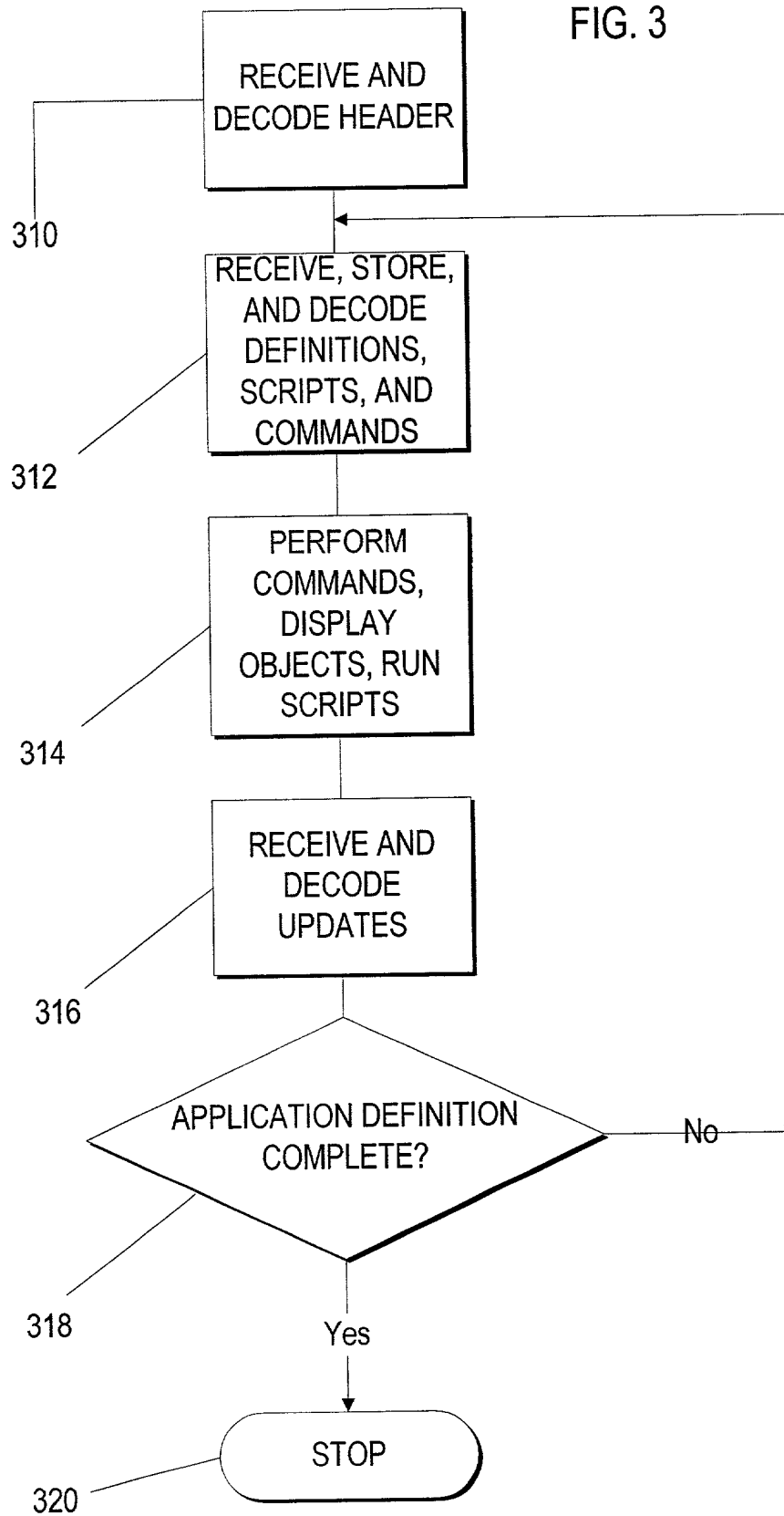


FIG. 2

FIG. 3



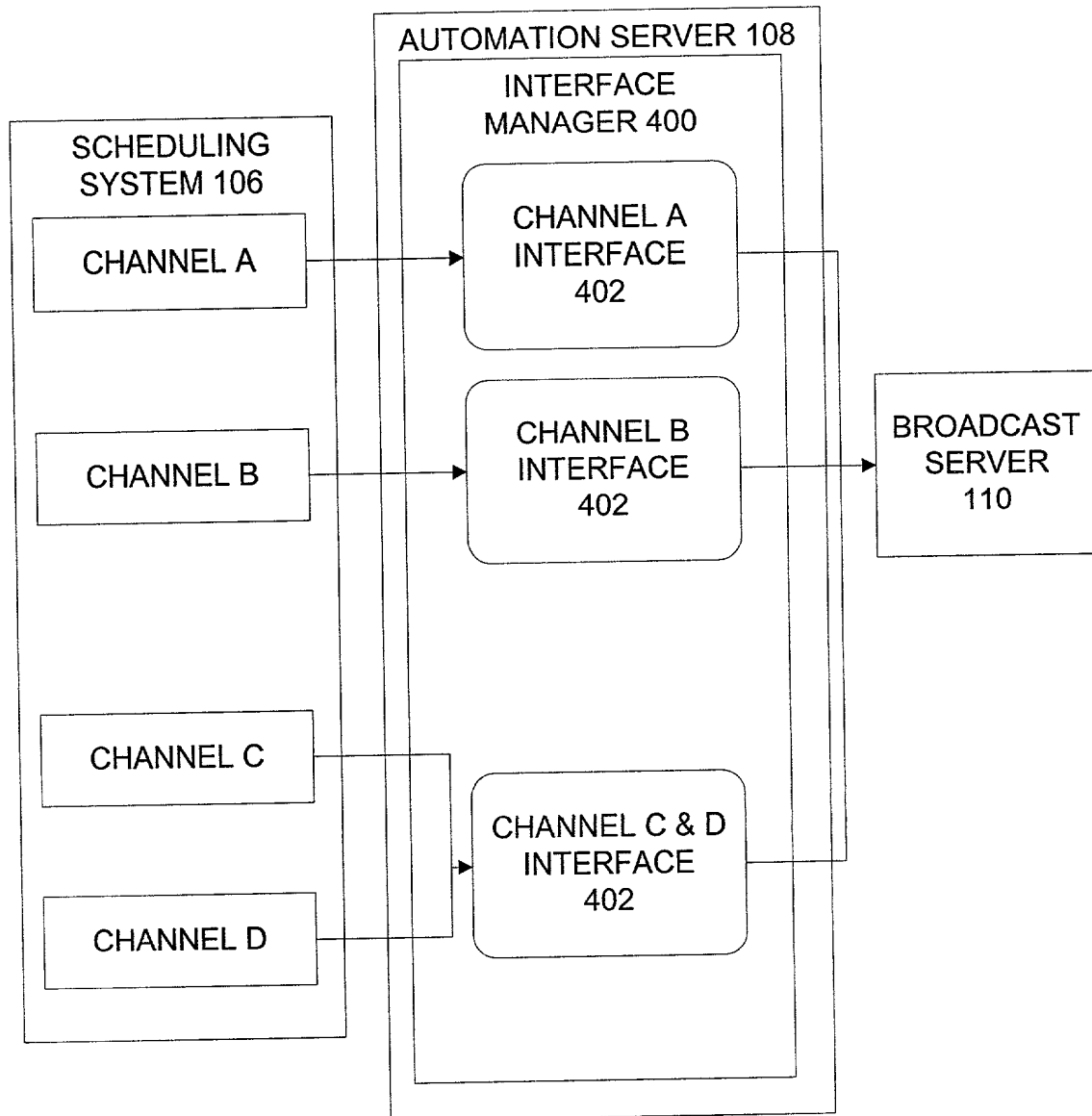


FIG. 4

FIG. 5 is a block diagram of a Channel Interface 402, according to one embodiment of the present invention. The Channel Interface 402 includes a Translator Module 502 and an Event Manager 504. The Translator Module 502 includes Mapping Logic 506, a plurality of State Machines for Program #1 (510), #2 (510), ..., #N (510), and Mapping Logic 514. The Event Manager 504 includes Mapping Logic 508, a plurality of Event Managers #1 (512), #2 (512), ..., #M (512), and Mapping Logic 514. The Channel Interface 402 is connected to a Scheduling System 106 and a Broadcast Server 110.

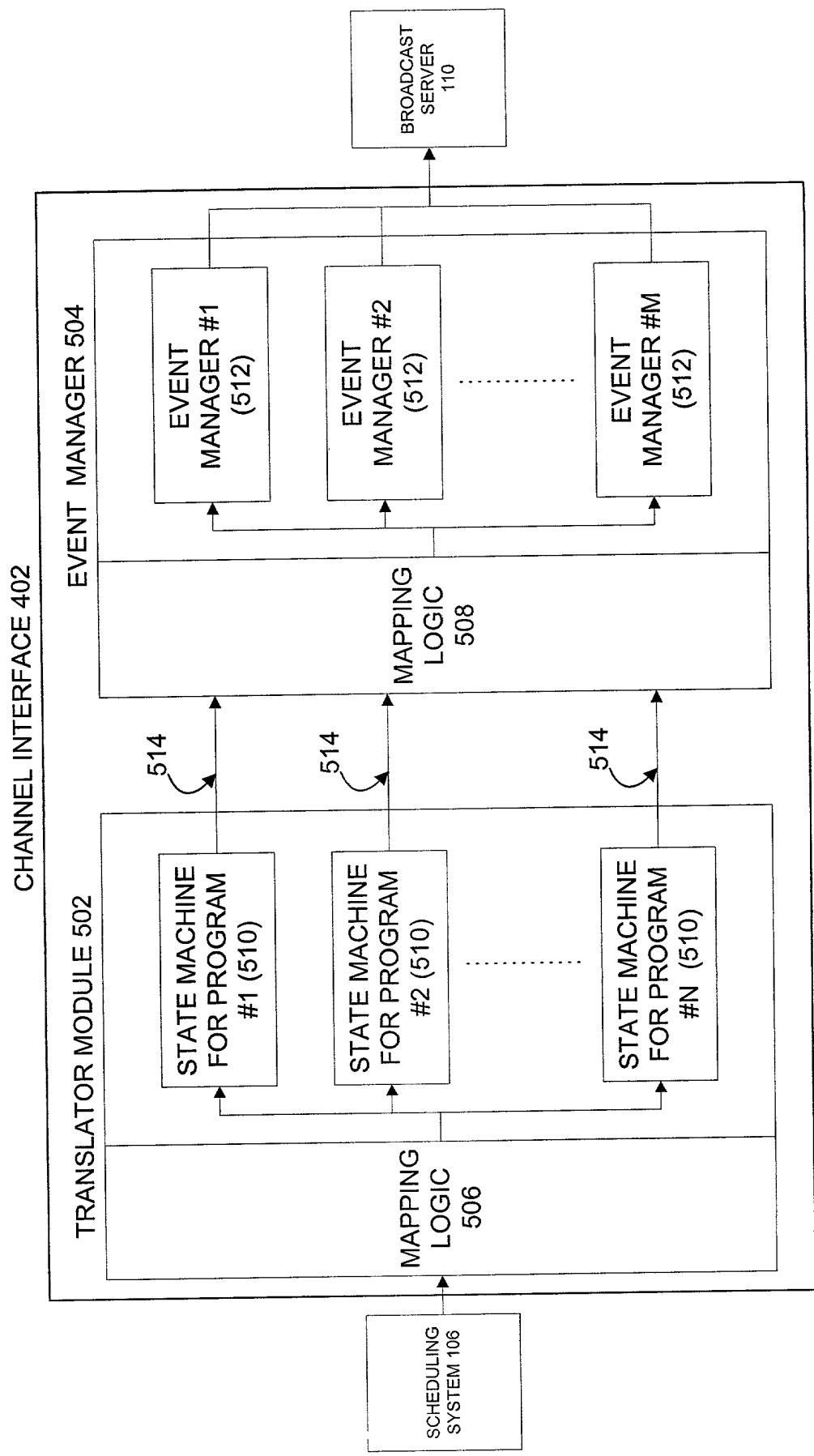


FIG. 5

Interface Manager Life Cycle Interaction Diagram

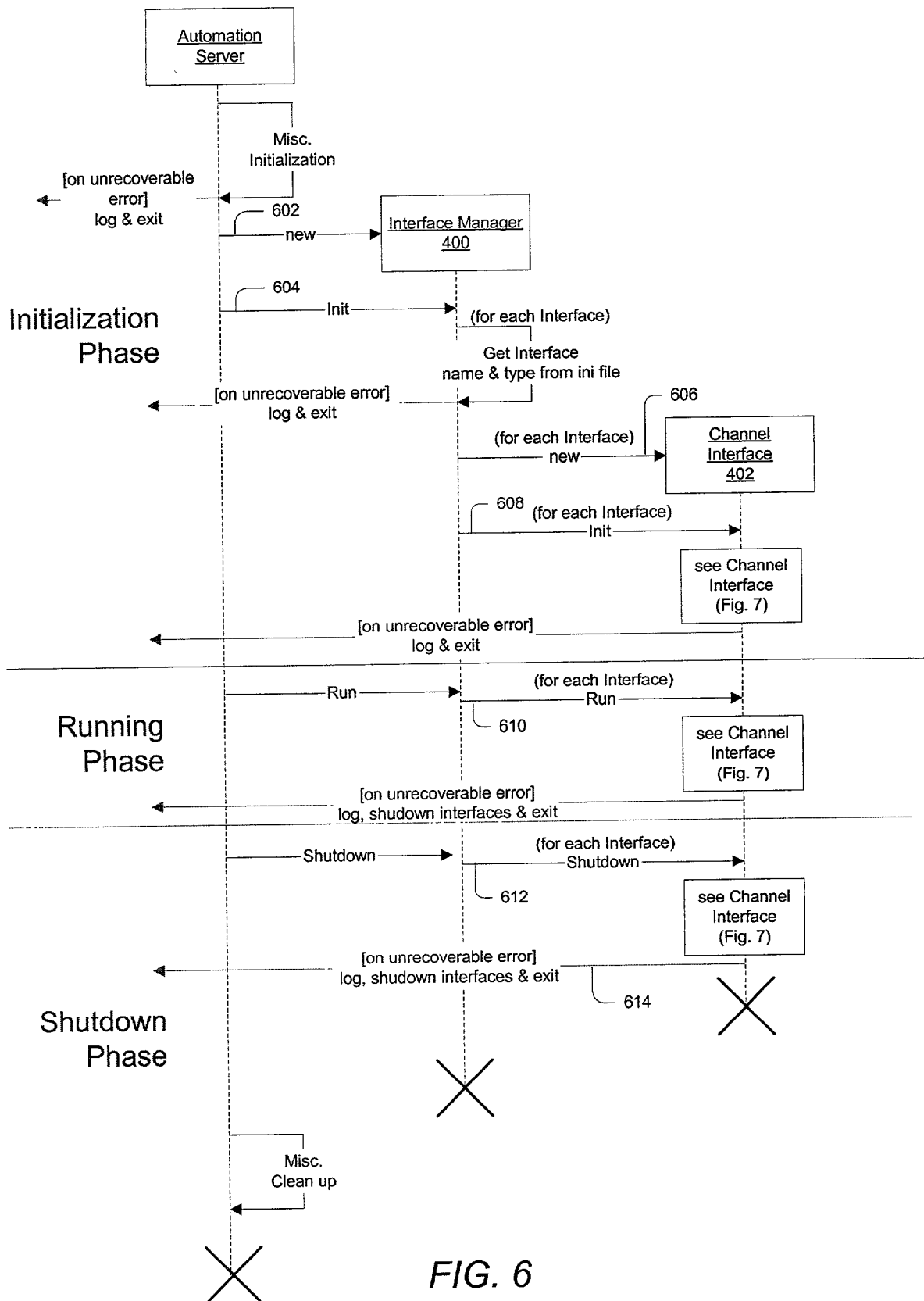


FIG. 6

Interface Life Cycle Interaction Diagram

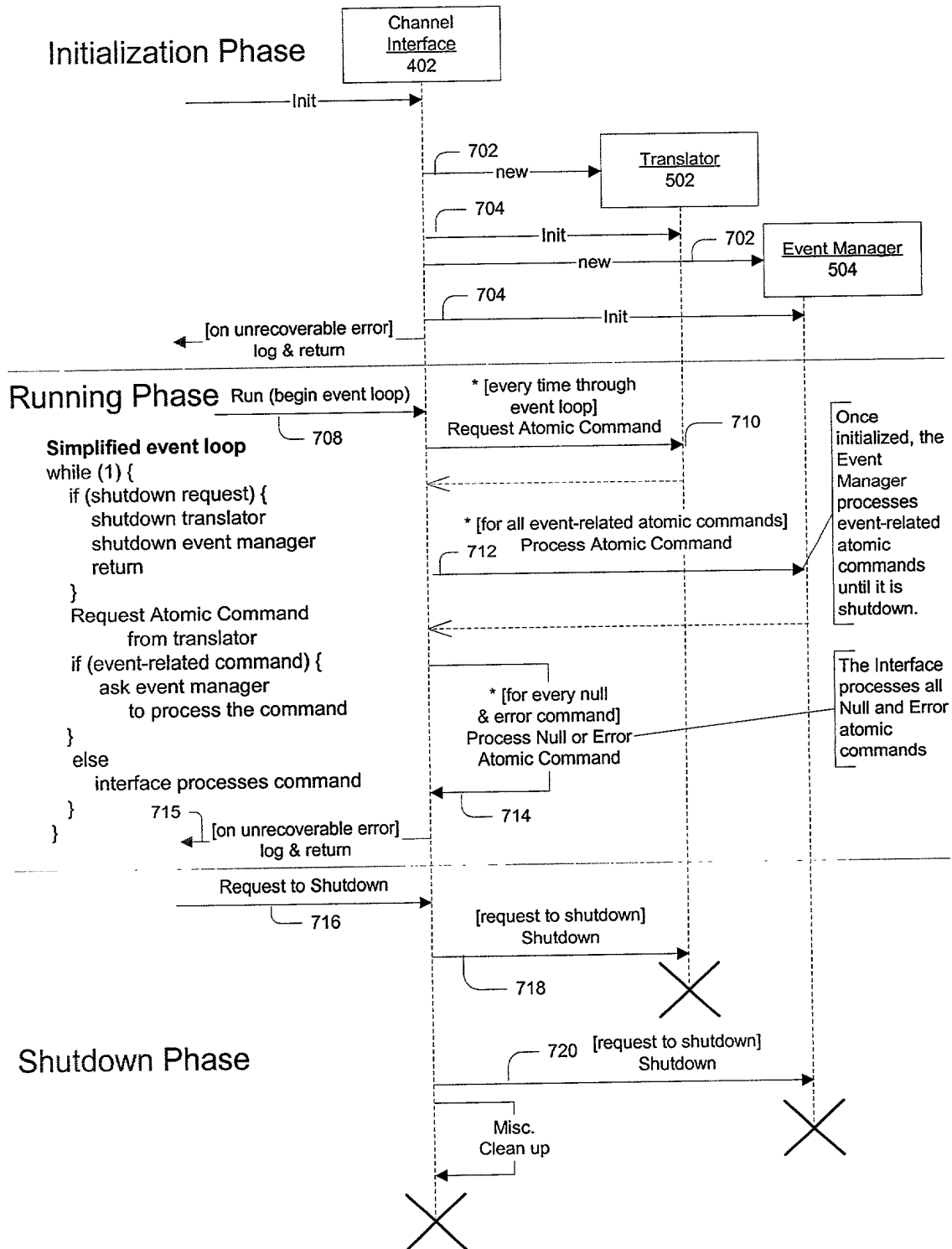
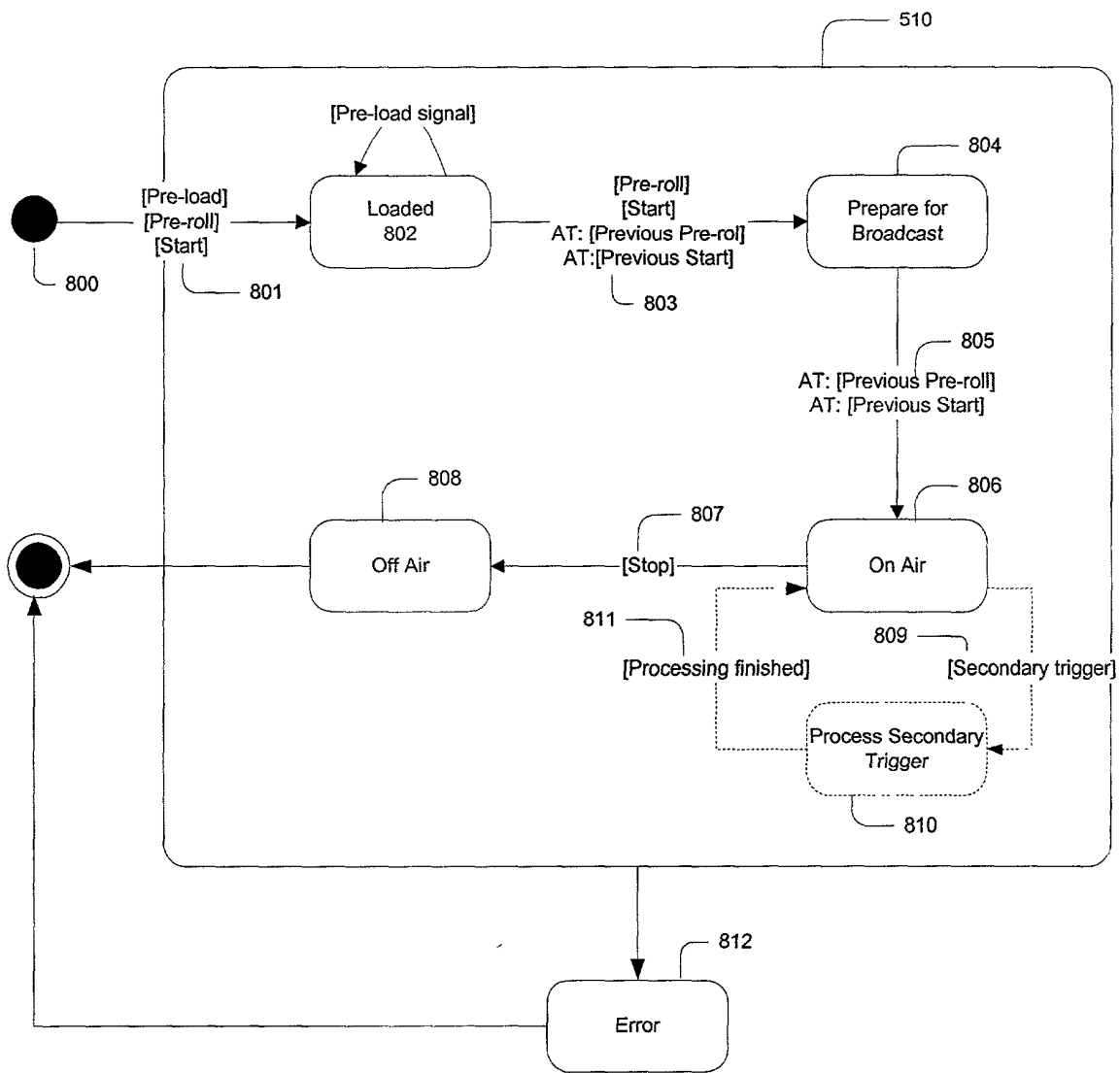


FIG. 7



AT: Automatic Transition on Previous Signal

FIG. 8

FIG. 9 is a flowchart illustrating a process for handling a scheduling system signal. The process begins with a "Scheduling System Signal" (900) which leads to a decision point "Event Signal?" (902). If the answer is "NO", the process proceeds to a decision point "Error Signal?" (904). If the answer to "Error Signal?" is "YES", the process proceeds to "Pass the Signal onto the Event Manager Module" (906). If the answer to "Error Signal?" is "NO", the process proceeds to "Ignore Signal" (910). If the answer to "Event Signal?" is "YES", the process proceeds to a decision point "New Event?" (908). If the answer to "New Event?" is "YES", the process proceeds to "Create a Translator State Machine for the new Event" (912), which then leads to "Start the Translator State Machine for the new Event" (914). If the answer to "New Event?" is "NO", the process proceeds to "Pass Signal Onto the Translator State Machine for that Event" (916).

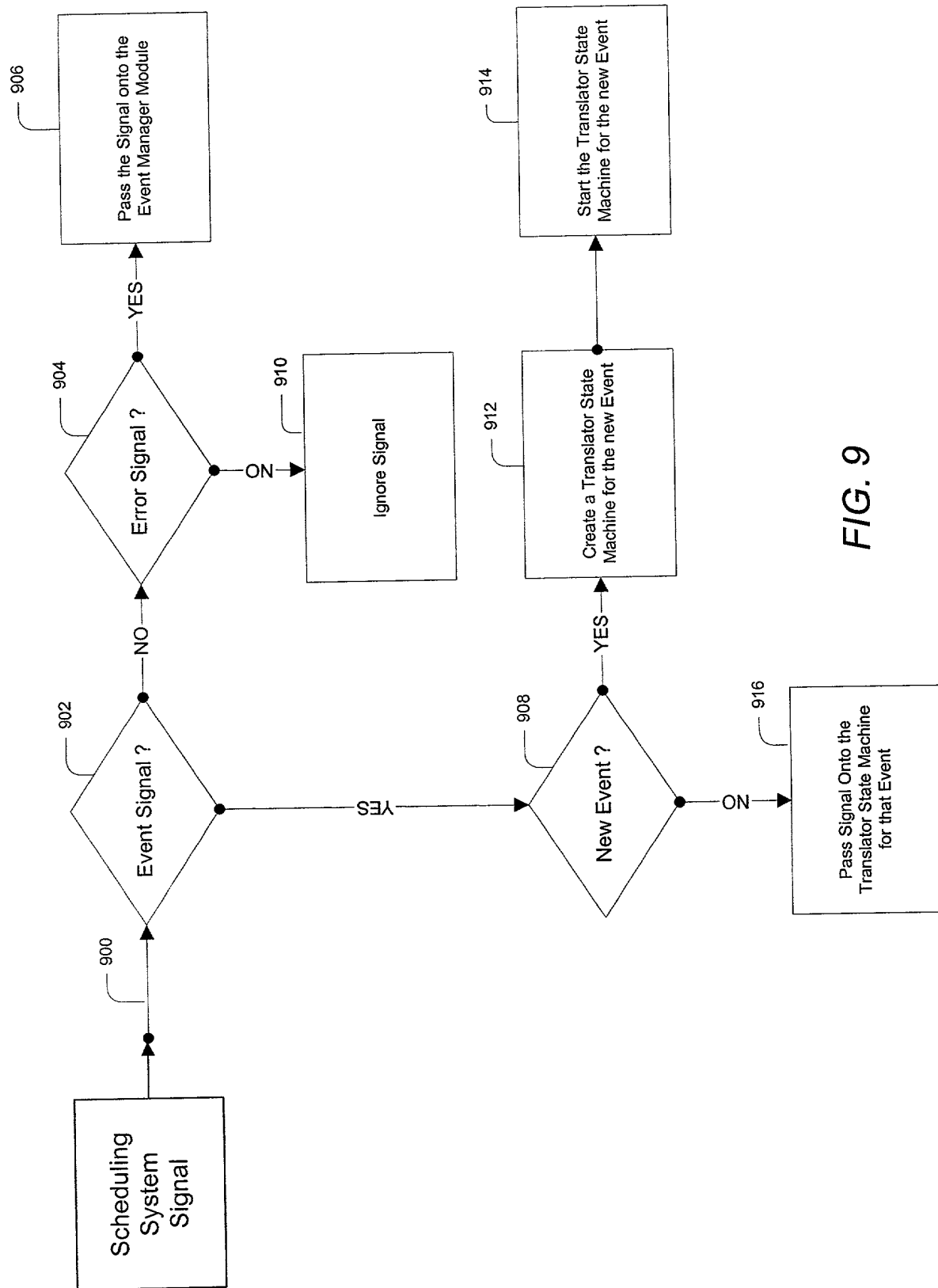


FIG. 9

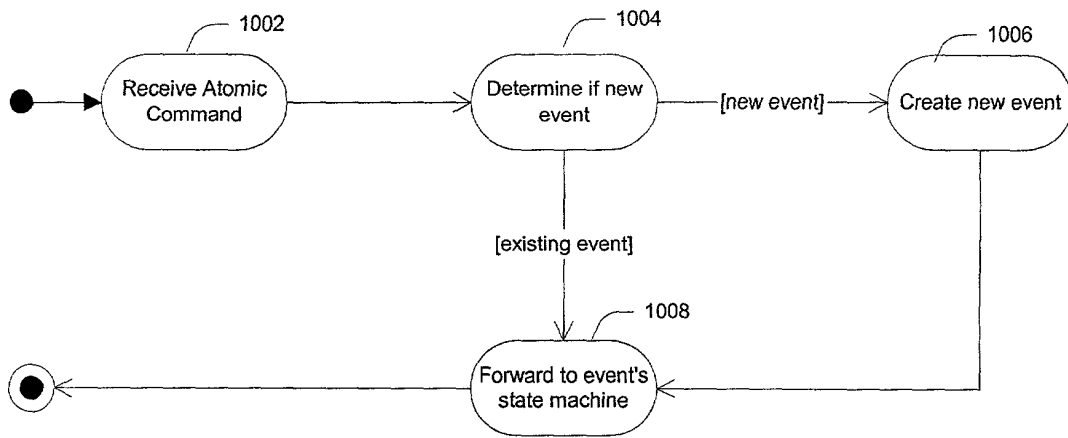


FIG. 10

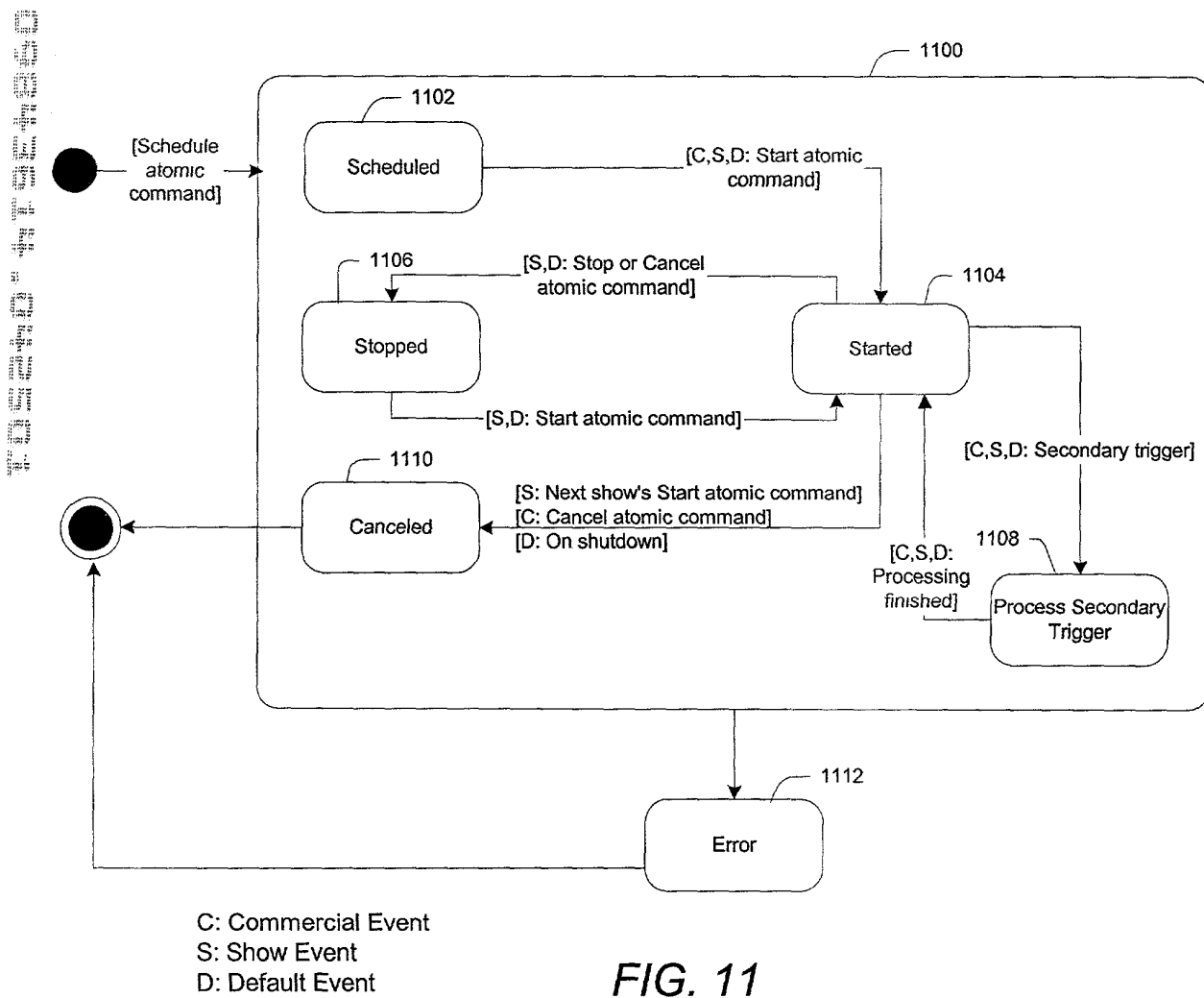


FIG. 11

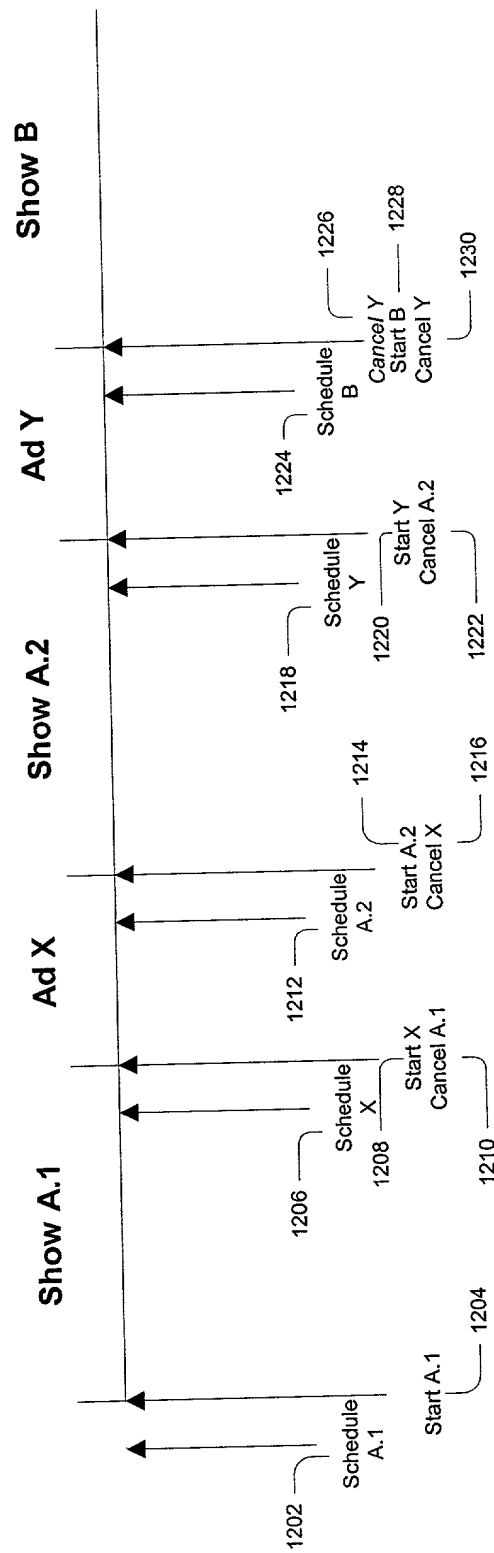


FIG. 12

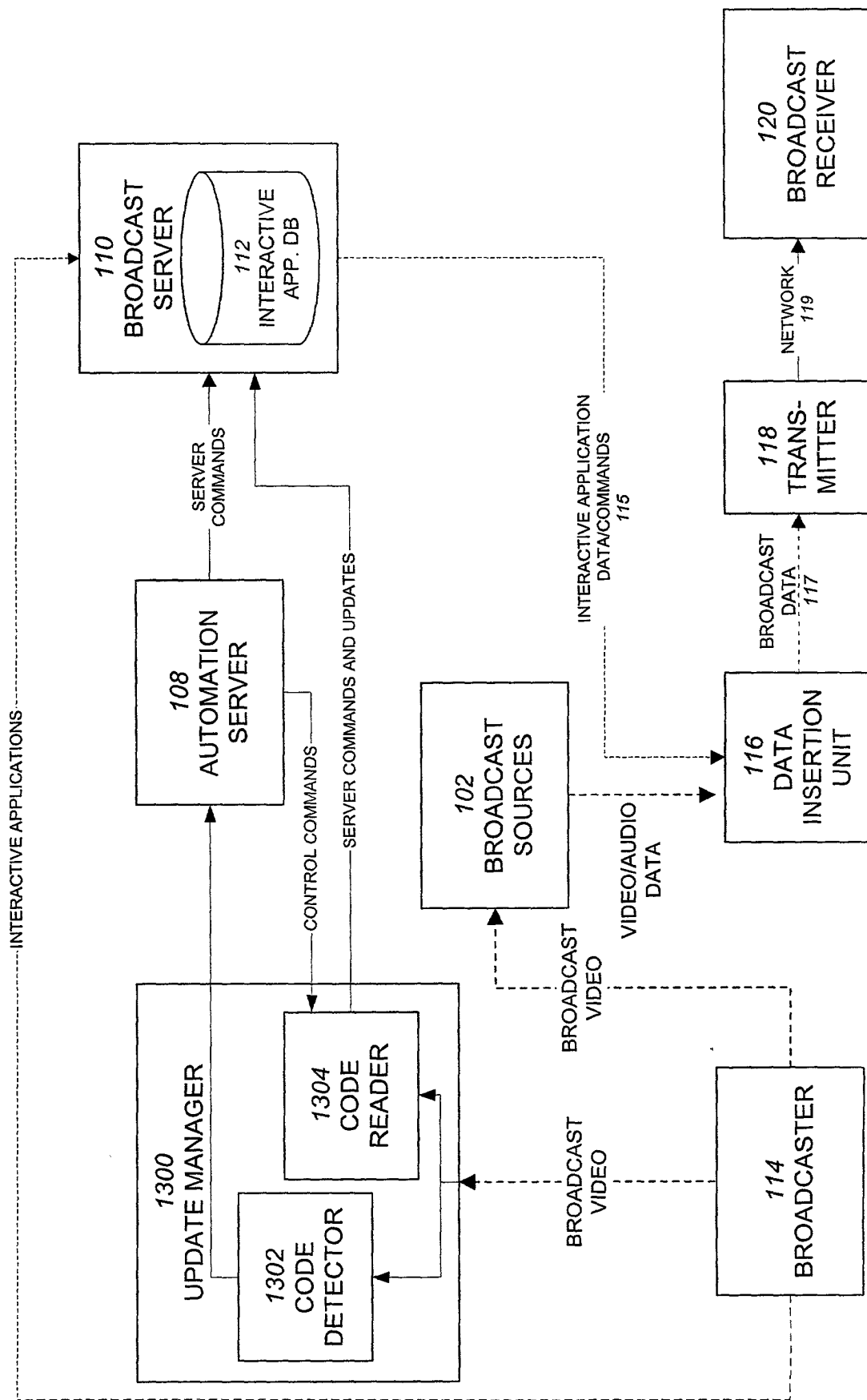


FIG. 13